6 Acknowledgements

I am grateful to all the respondents from the Nordic LCA environment who have made this survey possible. I am also indebted to my colleagues in STØ who have commented on and improved the manuscript: Anne Rønning, Kristin Magnussen and Mie Vold. Thanks also to Erik Stoltenberg-Hansson for commenting on an earlier version of the manuscript.

Financial support to the work has been received from the Norwegian Research Council through the program Productivity 2005, Industrial Ecology.

7 References

Albe, S.; Braunschweig, A.; Müller-Wenk, R. (1990): Methodik für Ökobilanzen auf der Basis ökologischer Optimierung. Schriftenreihe Umwelt Nr. 133, BUWAL, Bern, Switzerland

Baumann, H.; Rydberg, T. (1994): Life Cycle Assessment: A comparison between three methods for impact analysis and valuation. J. Cleaner Prod. 2, 13-20

Baumann, H. (1992): Utvärdering med index. Beräkning av två uppsättingar norska index. CIT-ekologic 1992:2, Chalmers Industriteknik, Göteborg

Baumann, H. (1996): LCA Use in Swedish Industry. Int. J. LCA 1, 122-126

Hansen, E. (1995): Environmental Ranking of Products. Environmental Project no 281, Danish Environmental Protection Agency, Copenhagen (in Danish)

Hanssen, O.J. (1993): Proceedings from International Workshop Product Systems Development and Improvements in a Life Cycle Context. Østfold Research Foundation, Working Paper AR02.93

Hanssen, O.J. (1997): Sustainable Industrial Product Systems. Dr. techn. thesis, Norwegian University of Science and Technology, Trondheim. Østfold Research Foundation, Working Paper AR.20.97

Hanssen, O.J. (1998): Environmental Impacts of Product Systems in a Life Cycle Perspective. A General Survey based on 18 Life Cycle Assessment Studies. J. Cleaner Prod. 6, 299-311

Hanssen, O.J.; Ronning, A.; Rydberg, T. (1995): Sustainable Product Development. Methods and Experiences from Case Projects. Final Results from the NEP project. Østfold Research Foundation. Research Paper OR 28.95, 82 pp

Hauschild, M.; Wenzel, H. (1998): Environmental Assessment of Industrial Products. Vol. 2: Scientific Background. Institute for Product Development, Technical University of Denmark, Chapmann & Hall

Karlson, L. (1993): Product Ecology Project. Participants' experiences. ABB Corporate Research, Väseråa, Sweden

Lindfors, L.G.; Christiansen, K.; Hoffmann, L.; Virtanen, Y.; Juntilla, V.; Leskinen, A.; Hanssen, O.J.; Rønning, A.; Ekvall, T.; Finnveden, G. (1995a): LCA Nordic Technical Reports No. 1-9. Tema Nord 1995: 502

Lindfors, L.G.; Christiansen, K.; Hoffmann, L.; Virtanen, Y.; Juntilla, V.; Leskinen, A.; Hanssen, O.J.; Rønning, A.; Ekvall, T.; Finnveden, G. (1995b): LCA Nordic Technical Reports No. 10 and Special Reports No. 1-2. Tema Nord 1995:503

Magnussen, K.; Rønning, A.; Møller, H. (1998): Valuation in LCA. Østfold Research Foundation, OR.11.98 (in Norwegian)

Møller, H.; Hanssen, O.J.; Lindfors, L.G.; Svensson, T.; Hoffmann, L.; Stranddorf, H.K.; Toldsted, J.T; Rønning, A. (1998): Nordic project on Implementation of Environmental Labelling Type III In the business sector (NIMBUS). Report from the pilot study on Nordic Environmental Product Declarations. Østfold Research Foundation, OR.27.98

Myklebust, O.; Lamvik, T.; Støren, S. (1997): Nordlist LCA Project. Life Cycle Assessment in Product Development. NTNU, SINTEF, STØ, DTU. SINTEF Report No. STF38 S97001,74 pp

Nordic Council of Ministers (Nord, 1992): Product Life Cycle Assessments – Principles and Methodology. Nord, 1992:9, 288 pp

Nordic Council of Ministers (Nord, 1995): Nordic Guidelines on Product Life-Cycle Assessments. Nord, 1995:20, 222 pp

Nordic Council of Ministers (Nord, 1998): Common Nordic Seminar on Product Oriented Environmental Strategies (POMS). Seminar Report, March 1998

Økstad, E. (1997): Environmental Performance Indicators in Industry. Practical experiences with developing EPI's in 12 companies. European Green Table/Federation of Norwegian Business and Industries, Oslo, 57 pp

Pedersen, B.; Christensen, K. (1992): A Meta-Review on Product Life Cycle Assessment. Nord, 1992:9, 24-104

Rønning, A.; Vold, M. (1997): Nordic Seminar on LCA. Østfold Research Foundation OR.90.97

Rønning, A.; Hanssen, O.J.; Møller, H. (1995): Environmentally Sound Product Development of Offshore Coatings. Østfold Research Foundation Project Report OR.40.95, 32 pp

Ryding, S.-O.; Steen, B. (1992): The EPS Environment Method. An application of environmental accounting principles for evaluation and valuation of environmental impacts in product design. Swedish Environmental Research Institute Report, Gothenburg

Ryding, S.-O. (1993): International Experiences of Environmentally Sound Product Development Based on Life Cycle Assessment (LCA). Federation of Swedish Industries, Stockholm

Udo de Haas, H. A.; Wrisberg, N. (1997): Life Cycle Assessment: State-of-the-Art and Research Priorities. LCA Documents, Vol. 1. Eco-Informa Press, Bayreuth

Vold, M.; Rønning, A. (1995): LCA of Cement and Concrete – Main report. Østfold Research Foundation Project Report OR.32.95, 50 pp

Wenzel, H.; Hauschild, M.; Alting, L. (1997): Environmental Assessment of Industrial Products. Vol. 1: Tools and Case studies. Institute for Product Development, Technical University of Denmark, Chapmann & Hall

Received: January 12th, 1999
Accepted: July 26th, 1999